1. Record Nr. UNINA9910813926503321

Titolo	Advances in structural analysis of advanced materials : selected, peer reviewed papers from the International Conference on Structural Analysis of Advanced Materials (ICSAAM - 2009), September 7-10, 2009, Tarbes, France / / edited by Moussa Karama
Pubbl/distr/stampa	Stafa-Zurich ; ; Enfield, New Hampshire : , : Trans Tech Publications, , [2010] ©2010
ISBN	3-03813-406-6
Descrizione fisica	1 online resource (189 p.)
Collana	Advanced materials research, , 1022-6680 ; ; volume 112
Altri autori (Persone)	KaramaMoussa
Disciplina	624.18
Soggetti	Structural analysis (Engineering) Materials
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	Advances in Structural Analysis of Advanced Materials; Preface; Table of Contents; Effect of Fiber Treatment on Fiber Strength and Fiber/Matrix Interface of Hemp Reinforced Polypropylene Composites; A Study of Mechanisms of Poly (PhenyleneSulfide) Thermal Degradation in Air; Chemical Structure Influence of Silicone Adhesives on Curing Process; Dispersion Improvement of Carbon Nanotubes in Epoxy Resin Using Amphiphilic Block Copolymers; Study of DGEBA and Novolac Adhesive Solutions between Ceramic and Steel Substrates; Shear Test on CFRP Full-Field Measurement and Finite Element Analysis Thermo-Mechanical Behaviour of the Raffinate Resulting from the Aqueous Extraction of Sunflower whole Plant in Twin-Screw Extruder: Manufacturing of Biodegradable Agromaterials by Thermo-PressingFailure Mechanisms of Thin Hard Coatings Submitted to Repeated Impacts: Influence of the Film Thickness; Identification of the Sn96.5Ag3.5 Law Behavior with the Scatter of the Parameters - Study of Aeronautical Application in Power Module; Numerical Modeling of Chemical and Thermal Coupling in a Silicon Carbide Based Heat Exchanger Reactor Digital Image Stereo-Correlation Applied to the Identification of

ElastomersLifetime and Reliability Assessment of AlN Substrates Used in Harsh Aeronautic Environments Power Switch Modules; Prediction of Lifetime in Static Fatigue at High Temperatures for Ceramic Matrix Composites; An On-Line ANN-Based Approach for Quality Estimation in Resistance Spot Welding; Stability Prediction in Turning of Flexible Components; Geometric and Kinematic Modelling of a New Parallel Kinematic Machine Tool: The Tripteor X7 Designed by PCI
Links Between Machining Parameters and Surface Integrity in Drilling Ni-SuperalloyControl of Chatter by Spindle Speed Variation in High-Speed Milling; Keywords Index; Authors Index

Sommario/riassunto

The increased use of advanced materials in high-efficiency structures - electronic devices, medical equipment, aircraft and vehicles - requires an improved reliability, increased resistance to breakdown, and better failure and life-span forecasting for a wide variety of loading conditions. The development of materials having advanced structural properties is becoming a key factor in industrial and technological progress. The aim of this special collection was to provide a forum where engineers, researchers, scientists and industrial experts could present their work and discuss the current situ